APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/580,448	05/30/2000	Scott Andrew Snyder	051638-5001-02	2465

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EXAMINER
SUBRAMANIAN, NARAYANSWAMY

ART UNIT	PAPER NUMBER
3624	

DATE MAILED: 08/05/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 07-01)

Office Action Summary	Application No.	Applicant(s)
	09/580,448	SNYDER, SCOTT ANDREW
	Examiner	Art Unit
	Narayanswamy Subramanian	3624

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on _30 May 2000_.

2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) _1-53_ is/are pending in the application.

     4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) _1-53_ is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.

     If approved, corrected drawings are required in reply to this Office action.

12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

     a) ☐ All   b) ☐ Some *   c) ☐ None of:

       1. ☐ Certified copies of the priority documents have been received.

       2. ☐ Certified copies of the priority documents have been received in Application No. _____ .

       3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

     * See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

     a) ☐ The translation of the foreign language provisional application has been received.

15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _2_.

4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____ .

U.S. Patent and Trademark Office
PTO-326 (Rev. 04-01)   Office Action Summary   Part of Paper No. 1

DETAILED ACTION

1.   Original claims 1-53 have been examined. The rejections are stated below.

Claim Rejections - 35 USC § 102

2.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999

(AIPA) do not apply to the examination of this application as the application being examined

was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C.

122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment

by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3.   Claims 1-7, 9-11, 13, 14, 17-22, 26-31, 33-35, 37, 38, 41, 42 and 46-53, and are rejected

under 35 U.S.C. 102(e) as being anticipated by Sammon, Jr et al (US Patent 6012051).

With reference to Claims 1 and 26, Sammon discloses a method and means for assisting a

customer in choosing a combination of commodity options, wherein said combination has at

least two commodity categories, and each commodity category has at least two options, the

method comprising the steps of: (a) ranking the options within each commodity category; (b) for

each commodity category, creating a plurality of combinations of commodity options by (i)

selecting a highest ranked option for a commodity category; (ii) selecting any options in other

commodity categories that are linked to the option selected in step (b)(i); (iii) selecting valid

options for remaining commodity categories, until the combination of commodity options is complete; (c) calculating a total effective cost of each combination of commodity options; and (d) presenting the combinations of commodity options to the customer, whereby the customer selects a combination of commodity options for purchase. (See Sammon Column 3 line 8 – Column 4 line 13). The scores are interpreted to include the effective cost and the relationship between attributes that have to be satisfied is interpreted to include the linking feature and the valid options.

With reference to Claims 2 and 27, Sammon discloses a method and means of claims 1 and 26 respectively, further comprising the steps of visiting a web site by the customer; and sending the preferences of the customer to the web site. (See Sammon Column 1 lines 57-60).

With reference to Claims 3, 4 and 28, Sammon discloses a method and means of claims 1 and 26 respectively, wherein step (b) comprises the additional steps of: (iv) selecting a next ranked option for a commodity category; (v) selecting any options in other commodity categories that are linked to the option selected in step (b)(iv); and (vi) selecting valid options for remaining commodity categories until the combination of commodity options is complete and the steps (b)(iv), (b)(v) and (b)(vi) are repeated for a plurality of ranks. (See Sammon Column 3 lines 15-42).

With reference to Claims 5 and 29, Sammon discloses a method and means of claims 1 and 26 respectively, wherein step (d) comprises presenting the combinations of commodity options ranked personally for the consumer based on the consumer's preferences and requirements. The preferences are interpreted to include costs and the ranking is interpreted to include total effective cost as a criterion.

With reference to Claims 6, 7, 30 and 31, Sammon discloses a method and means of claims 1 and 26 respectively, wherein step (a) comprises computing the scores for each option and ranking the options within each category by scores. (See Sammon Column 3 lines 27-42). The scores are interpreted to include the effective cost.

With reference to Claims 9 and 33, Sammon discloses a method and means of claims 7 and 31 respectively, wherein the options are ordered according to user's preferences (See Sammon Column 3 lines 8-42). The steps of ordering the options according to user's preferences is interpreted to include the steps of calculating a total effective cost for each of the plurality of combinations of commodity options by adding the effective costs of the selected options in the combinations of commodity options.

With reference to Claims 10 and 34, Sammon discloses a method and means of claims 7 and 31 respectively, wherein step (a) comprises the steps of, for each category:

(i) identifying at least one first parameter associated with a commodity option;

(ii) associating at least one value to the at least one first parameter;

(iii) calculating an estimated cost of the commodity option based on features of the commodity category that are desired by the customer;

(iv) obtaining from the customer a preference weighting on at least one second parameter;

(v) calculating an effective cost of the commodity option by adjusting the estimated cost based on the preference weighting and the at least one value assigned to the parameters; and

(vi) ranking the options within each category by effective cost. (See Sammon Column 1 line 50 – Column 2 line 61 and Column 3 line 8 – Column 4 line 13). The attributes and scores are interpreted to include costs and effective costs respectively).

With reference to Claims 11 and 35, Sammon discloses a method and means of claims 10 and 34 respectively, wherein the parameter is a feature, an attribute, or a performance characteristic associated with the commodity category. (See Sammon Column 7 line 33 – Column 8 line 22).

With reference to Claims 13, 14, 37 and 38, Sammon discloses a method and means of claims 10 and 34 respectively, wherein the user preferences and customer information is stored in a first database, information about the commodity including bundling links and combinations created in step (b) are stored in a second database. (See Sammon Column 5 lines 14-31). The user profile data structure could be partitioned such that the user preferences and requirements that define the utility function are in one database and other user information are in a separate database.

With reference to Claims 17 and 41, Sammon discloses a method and means of claims 1 and 26 respectively, wherein the customer determines the commodity categories included in the combination. (See Sammon Column 1 lines 60-64).

With reference to Claims 18 and 42, Sammon discloses a method and means of claims 1 and 26 respectively, wherein the commodity categories that are included in the combination are predefined. (See Sammon Column 1 lines 57-60).

With reference to Claims 19-22, Sammon discloses a method claim 1, wherein the commodities include a large number of multi-faceted items. (See Sammon Column 3 lines 57-60 and Column 15 lines 18-24). The multi-faceted items are interpreted to include products and services including telephone services and handsets.

With reference to Claims 46 and 51, Sammon discloses a method and a computer system of combining commodity options into a grouping that is offered as a combination of commodities options in a system for optimizing customer selections of a combination of commodities, comprising the steps of: (a) selecting an option for a commodity category into a grouping, where the option is not currently being used in another grouping; (b) determining whether the selected option is linked to other options; (c) if the option is determined to be linked in step (b), selecting the linked options into the grouping; (d) if the grouping is not complete, determining an option that has not previously been used in a grouping, wherein either the determined unused option is linked to options in categories that do not have options selected in the grouping, or the determined unused option has no links, and selecting the determined unused option and any linked options into the grouping; and (e) repeating step (d) until the grouping is complete. (See Sammon Column 3 line 8 – Column 4 line 13 and Column 4 line 60 – Column 6 line 41). The relationship between attributes that have to be satisfied is interpreted to include the linking feature and the unused options.

With reference to Claims 47 and 48, Sammon discloses a method claim 46, wherein the option selected in step (a) is a ranked option and includes a highest ranked option. (See Sammon Column 11 lines 44-51)

With reference to Claims 49 and 50, Sammon discloses a method claim 46, wherein steps (a) - (e) are repeated for each commodity category within a combination for a plurality of ranks. (See Sammon Column 3 lines 15-42).

With reference to Claims 52 and 53, Sammon discloses a computer program product of

claim 51, wherein the option selected by the first computer readable program code means is a

ranked option and includes a highest ranked option. (See Sammon Column 5 lines 27-32).

Claim Rejections - 35 USC § 103

4.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or
> described as set forth in section 102 of this title, if the differences between the subject
> matter sought to be patented and the prior art are such that the subject matter as a whole
> would have been obvious at the time the invention was made to a person having ordinary
> skill in the art to which said subject matter pertains. Patentability shall not be negatived
> by the manner in which the invention was made.

5.   Claims 8 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sammon,

Jr et al (US Patent 6012051) in view of Kimura et al (US Patent 5521364).

With reference to claims 8 and 32, Sammon discloses a method and means of claims 1

and 26 respectively, wherein step (a) comprises computing the scores for each option and

ranking the options within each category by scores. (See Sammon Column 3 lines 27-42). The

scores are interpreted to include the effective cost.

Sammon fails to teach the step of including bundling discounts in computing the effective

cost.

Kimura discloses a method and means for including bundling discounts in the

administration of selling products and services. (See Kimura Column 1 lines 19-26 and 63-67).

It would have been obvious to one with ordinary skill in the art at the time of the current

invention to combine the steps taught by Kimura to the invention of Sammon. The combination

of the disclosures taken as a whole, suggests that the effective costs would be more

comprehensive and the ranking of alternatives more accurate if bundling discounts were

considered.

6.   Claims 12, 15, 16, 36, 39 and 40 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Sammon, Jr et al (US Patent 6012051) in view of Ulwick (US Patent

6085165).

With reference to claims 12, 15, 16, 36, 39 and 40, Sammon discloses a method and

means as described in the discussion of claims 10 and 34 above. Sammon also discloses the step

of setting a range for the at least one first parameter. (See Sammon Column 8 lines 8-22).

Sammon fails to teach the steps of sampling a random set of customers over the range,

determining a best-fit utility function using regression analysis, determine using the utility

function a value that represents a cost or a benefit of the parameter to the customer, subtract the

benefit and add the cost to the effective cost.

Ulwick teaches the steps of using the data for multiple users and using matrix analysis

and mathematical algorithm to develop the predictive metrics for the users. (See Ulwick Column

5 lines 1-39). The predictive metrics are interpreted to include the Utility function and the cost or

benefit of the parameter to the customer. The matrix analysis and mathematical algorithm are

interpreted to include regression analysis. Official notice is taken that subtracting benefit and

adding costs to a cost figure are old and well known in the art.

It would have been obvious to one with ordinary skill in the art at the time of the current

invention to combine the steps taught by Ulwick to the invention of Sammon. The combination

of the disclosures taken as a whole, suggests that it would help the sellers better tailor the options

they offer to suit the needs of a target group of customers. The combined disclosures also suggest

that expressing the outcomes in terms of effective costs will give the user a better idea about the

relative costs of the various combinations.

7.   Claims 23-25 and 43-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Sammon, Jr et al (US Patent 6012051) in view of Scott et al (US Patent 6292787).

With reference to claims 23-25 and 43-45, Sammon discloses a method and means as

described in the discussion of claims 1 and 26 above. The alternatives are ranked using the

preferences indicated by the customer.

Sammon fails to teach the steps of (e) receiving from the customer a combination of

commodity options, wherein the commodity options are selected by the customer, and

calculating a total effective cost of the customer-selected combination of commodities;

presenting the combinations of commodity options created in step (b) of claim 1 with the

combination of commodity options created by the customer in step (e) ranked by total effective

cost; and the customer selecting a portion of a combination of commodity options for purchase.

Scott teaches the steps of receiving the initial selection from the customer and implicitly

computing a cost of the initial selection, computing the costs of other alternative combinations so

that they can be compared and ranked if necessary. (See Scott Claim 1). Official notice is taken

that customer selecting a portion of a combination of commodity options for purchase is old and

well known in the art.

It would have been obvious to one with ordinary skill in the art at the time of the current

invention to combine the steps taught by Scott to the invention of Sammon. The combination of

the disclosures taken as a whole, suggests having the customer make the initial selection helps in

establishing a threshold to compare other combinations presented by the invention. The

combined disclosures also suggest that using costs to compare alternatives helps the customer

consider the options that will fit his/her budget.

Conclusion

8.   The prior art made of record and not relied upon is considered pertinent to applicant's

disclosure.

(a) Strevey et al (US Patent 6035305)(March 7, 2000) Computer-Based Method of

Structuring Product Configuration Information and Configuring a Product.

(b) Case et al (US Patent 5734890)(March 31, 1998) System and Method for Analyzing

Procurement Decisions and Customer Satisfaction.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Dr. Narayanswamy Subramanian whose telephone number is

(703) 305-4878. The examiner can normally be reached Monday-Thursday from 8:30 AM to

7:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Vincent Millin can be reached at (703) 308-1065.

The fax number for Formal or Official faxes and Draft or Informal faxes to Technology Center

3600 or this Art Unit is (703) 305-7687.

Any inquiry of a general nature or relating to the status of this application should be

directed to the Group receptionist whose telephone number is (703) 308-1113.
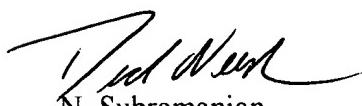
N. Subramanian
July 25, 2002